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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/507,230

09/09/2004

Rajen M. Patel

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109 7590 08/20/2009

The Dow Chemical Company
Intellectual Property Section
P.O. Box 1967
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EXAMINER

PIERY, MICHAEL T

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

08/20/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/507,230	Applicant(s) PATEL ET AL.	
	Examiner MICHAEL T. PIERY	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 and 35-53 is/are pending in the application.
- 4a) Of the above claim(s) 1-32 and 36-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33,35 and 53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 33 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ibrahim (US 3,325,876) in view of Morman (US 5,116,662), Lodoen (US 4,798,880) and Smith et al. (US 5,340,902).

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Ibrahim teaches stretching an elastic fiber, heating the elastic fiber until (Column 2, lines 40-59), cooling the fiber (the fiber is removed from the heat), removing the biasing force, and heating the fiber to reduce the length (Column 3, lines 15-18). Ibrahim does not explicitly define the recovery rate of the elastic material, however, Morman teaches elastic fibers are known to recover at least 50% of its length after stretching (Column 1, lines 60-68). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Ibrahim to include the fiber of Morman since it has been held that substitution of known equivalent elastic fibers is within routine skill of one in the art. Ibrahim does not explicitly teach heating the fiber until the crystals are molten. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Ibrahim to use higher temperature heat-setting and relaxing because it has been held that optimization of a result effective variable is within routine skill in the art (MPEP 2141). Lodoen teaches the heat-set and heat-relax temperatures are result effective variables because they affect the processing time (column 4, lines 1-16). One of ordinary skill in the art at the time of the invention would have had a reasonable expectation of success employing higher heat-set and heat-relax temperatures because Lodoen teaches it is known to heat-set and heat-relax spandex at high temperatures (195°C column 4, line 15). Ibrahim does not explicitly teach the fibers are melt spun. However, Smith teaches it is well-known to produce spandex fibers by melt-spinning. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Ibrahim to use melt spinning to produce the spandex fibers since it has been held that substitution of known equivalent fiber forming methods is within routine skill of one in the art (MPEP 2144).

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Regarding claim 53, Ibrahim teaches incorporating an inelastic material with the elastic fiber after the heat setting step, however, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the inelastic material prior to the heat setting step since it has been held that rearrangement of process steps is within routine skill of one in the art.

3. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ibrahim in view of Morman, Lodoen and Smith, as applied to claim 33 above, and further in view of Kahlisch (US 2,037,513).

The teachings of Ibrahim, Lodoen, Morman and Smith are applied as described above for claim 33.

Regarding claim 35, Kahlisch teaches it is known to use yarn to make a warp beam (Column 1, lines 3-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the yarn to make a warp beam because warp beams are commonly used to wind finished yarn products.

Response to Arguments

Applicant's arguments filed April 20, 2009 have been fully considered but they are not persuasive.

Applicant argues that claim 53 is not properly characterized as a rearrangement of process steps. The examiner disagrees. Claim 53 reorders the process of Ibrahim to incorporate the inelastic material prior to step a, rather than after the heating step.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL T. PIERY whose telephone number is (571)270-5047. The examiner can normally be reached on M-Th 8:30-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael T Piery/
Examiner, Art Unit 1791

/Monica A Huson/
Primary Examiner, Art Unit 1791